STATE OF DELAWARE
EXECUTIVE DEPARTMENT
OFFICE OF MANAGEMENT AND BUDGET
STATE PLANNING COORDINATION

February 20, 2008

Mr. David Braun
Braun Engineering & Surveying
429 S. Governors Avenue
Dover, DE 19904

RE: PLUS review – 2008-01-12; Mitten Industrial Park

Dear Mr. Braun:

Thank you for meeting with State agency planners on January 23, 2008 to discuss the proposed plans for the Mitten Industrial Park project to be located on Lafferty Lane, east of Bay Road.

According to the information received, you are seeking site plan approval for an 86,400 sq. ft. industrial park with materials processing.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as the City of Dover is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the City.

## <u>Executive Summary</u>

The following section includes some site specific highlights from the agency comments found in this letter. This summary is provided for your convenience and reference. The full text of this letter represents the official state response to this project. ***Our office notes that the applicants are responsible for reading and responding to this letter and all comments contained within it in their entirety.***

**State Strategies/Project Location**

- This project is located in Investment Level 3 according to the *Strategies for State Policies and Spending*. This site is also located in the City of Dover. Investment Level 3 reflects areas where growth is anticipated by local, county, and state plans in the longer term future, or areas that may have environmental or other constraints to development. In this case it appears that the existing trees on the parcel contributed to the designation of the site as a Level 3 area. Our office has no objections to the proposed development of this project in accordance with the relevant City codes and ordinances. We encourage you to design the site with respect for the environmental features which are present.

**Street Design and Transportation**

- The entrance location will need to be evaluated with regard to sight distance.

- It is not clear how far the sidewalks would be extended along Lafferty Lane, but DelDOT recommends that the developer provide a sidewalk to connect to the Kings Cliffe Mobile Home Park so that mobile home park residents could safely walk to work at the industrial park.

**Natural and Cultural Resources**

- Because of the parcel's location in an impaired watershed and the amount of impervious surface, consider incorporating more green technology BMPs and low impact development practices to reduce stormwater flow and to meet water quality goals.

- This site contains forested wetlands which can support an array of plant and animal species. Not only will a portion of this forest be cleared, but buildings, the stormwater pond, and roadways are well within 100 feet of wetland boundaries. Upland buffers around wetlands are important for protecting the function and integrity of the wetlands and for providing critical breeding habitat for wetland dependent species during a portion of their life cycle.

Recommendations:

1. The only way to reduce tree clearing would be to downsize the project area.

2. Consider using an alternative method of stormwater management that does not require tree removal. Options should be discussed with the district engineer or entity that certifies the stormwater plan. It is also recommended that at least a 100 feet buffer of existing vegetation is left between the pond and the wetland boundary.

3. If trees have to be cleared, we recommend they not be cleared from April 1st to July 31st to reduce impacts to wildlife that utilize trees for breeding. This would only protect those species for one breeding season because once trees are cleared there is an overall loss of habitat.

The following are a complete list of comments received by State agencies:

**<u>Office of State Planning Coordination – Contact: David Edgell 739-3090</u>**

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**<u>Division of Historical and Cultural Affairs – Contact: Terrance Burns 739-5685</u>**

No comments were received from the Division of Historical and Cultural Affairs.

**<u>Department of Transportation – Contact: Bill Brockenbrough 760-2109</u>**

1) The entrance location will need to be evaluated with regard to sight distance.

2) On December 21, 2007, DelDOT's new regulations regarding land development became effective. Under these new regulations, a traffic impact study (TIS) would be warranted for this development. However, under the previous regulations a TIS would not have been warranted. Because an application has

been filed with the City in accordance with required local procedures before March 31, 2008, as part of DelDOT's grandfathering provisions no TIS will be required. If for some reason the application is withdrawn or expires, and is resubmitted after March 31, 2008, the developer should be aware that a TIS will be required.

3) It is not clear how far the sidewalks would be extended along Lafferty Lane, but DelDOT recommends that the developer provide a sidewalk to connect to the Kings Cliffe Mobile Home Park so that mobile home park residents could safely walk to work at the industrial park. If City ordinances require only sidewalk along the site frontage, we would support reducing the requirement for sidewalk east of the site entrance in exchange for a good connection to the mobile home park. DelDOT understands from the discussion at the PLUS meeting that only the first 9,600 square foot building would be built initially. For that reason, it may be reasonable to require the extension of the sidewalk only as part of the second phase of the development.

4) One of the DelDOT subdivision managers, Mr. Natee Prasomsan, will be providing more detailed comments regarding specific requirements for access and off-site improvements as part of the City's Development Advisory Committee meeting on January 31. DelDOT recommends that the developer's engineer maintain coordination with Mr. Prasomsan through the plan development process. Mr. Prasomsan may be reached at (302) 760-2571.

**The Department of Natural Resources and Environmental Control – Contact: Kevin Coyle 739-9071**

**Soils**

According to the Sussex County soil survey update, Unicorn, Pineyneck, and Fallsington were mapped in the immediate vicinity of the proposed construction. Unicorn is a well-drained upland soil that has few limitations for development. Pineyneck is a moderately well-drained soil of low-lying uplands that has moderate limitations for development. Fallsington is a poorly-drained wetland associated (hydric) soil that has severe limitations for development. Approximately 60% +/- of the soils mapped on subject parcel were mapped as Fallsington; these soils have high potential to increase the intensity, duration, and frequency of future flooding events (both onsite and offsite) should they be filled, graded, or further disturbed. It is strongly recommended that such activities be avoided.

**Wetlands**

According to the Statewide Wetland Mapping Project (SWMP) mapping, palustrine scrub-shrub and palustrine emergent wetlands were mapped over most of this parcel. The mapped occurrence of the wetlands closely mirrors the mapped occurrence of the hydric soils.

Impacts to Palustrine wetlands are regulated by the U.S. Army Corps of Engineers (USACE, or "the Corps") through Section 404 of the Clean Water Act. In addition, individual 404 permits and certain Nationwide Permits from the Corps also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Division of Soil and Water Conservation, Delaware Coastal Management Program (DCMP) Section. Each of these certifications represents a separate permitting process. Please be advised that Nationwide permits have been suspended in Delaware and are pending further coordination with the Corps. Therefore, contrary to past practices, Coastal Zone Management approval can no longer be assumed. Individual certifications must be granted from the DCMP office for each project intending to utilize a Nationwide Permit. For more information on the Federal Consistency process, please contact the DCMP office at 302.739.9283. To find out more about permitting requirements, the applicant is encouraged to attend a Joint Permit Process Meeting. These meetings are held monthly and are attended by federal and state resource agencies responsible for wetland permitting. Contact Denise Rawding at (302) 739-9943 to schedule a meeting.

The PLUS application form states that the Corps has signed off on a wetlands delineation. The Department respectfully requests a copy of that determination.

Based on a review of existing buffer research by Castelle et al. (1994), an adequately-sized buffer that effectively protects wetlands and streams, in most circumstances, is about 100 feet in width. In recognition of this research and the need to protect water quality, the Watershed Assessment Section recommends that the applicant maintain/establish a minimum 100-foot upland buffer (planted in native vegetation) from the landward edge of all wetlands and water bodies (including all ditches).

**Impervious Cover**

Based on a review of the PLUS application form, post-construction surface imperviousness was projected to reach 15 percent. However, given the projected scope and density of this project, this estimate appears to significantly understate the actual amount of created post-construction surface imperviousness (appears closer to 90%). When calculating surface imperviousness, it is important to consider all created forms of constructed surface imperviousness (i.e., rooftops, sidewalks, roads, and stormwater management ponds) in the calculation for surface imperviousness; otherwise, an inaccurate assessment of this project's environmental impacts will result. Therefore, surface imperviousness should be recalculated with all of the above-mentioned forms of constructed surface imperviousness included.

Studies have shown a strong relationship between increases in impervious cover to decreases in a watershed's overall water quality. It is strongly recommended that the applicant implement best management practices (BMPs) that reduce or mitigate some of its most likely adverse impacts. Reducing the amount of surface imperviousness through the use of pervious paving materials ("pervious pavers") in lieu of asphalt or concrete in conjunction with an increase in forest cover preservation or additional tree plantings are some examples of practical BMPs that could easily be implemented to help reduce surface imperviousness.

**TMDLs**

Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Little Creek watershed. A TMDL is the maximum level of pollution allowed for a given pollutant below which a "water quality limited water body" can assimilate and still meet water quality standards to the extent necessary to support use goals such as, swimming, fishing, drinking water and shell fish harvesting. Although TMDLs are required by federal law, states are charged with developing and implementing standards to support these desired use goals. In the Little Creek watershed, a post-development TMDL reduction level of 40% will be required for nitrogen and phosphorus. Additionally, a TMDL reduction level of 75% will be required for bacteria.

**TMDL Compliance through the PCS**

As stated above, Total Maximum Daily Loads (TMDLs) for nitrogen and phosphorus have been promulgated through regulation for the Little Creek Watershed. The TMDL for nutrients and bacteria calls for a 40% reduction in nitrogen and phosphorus and a 75% percent reduction in bacteria, respectively; both nutrient and bacterial reductions must be from baseline conditions.

The Department has developed an assessment tool to evaluate how your proposed development may reduce nutrients and bacteria to meet the TMDL requirements. Additional nutrient reductions may be possible through the implementation of BMPs such as increasing passive, wooded open space (through native tree and shrub plantings), increasing upland buffer widths from wetlands, use of pervious paving materials to reduce surface imperviousness, and the deployment of green-technology stormwater management treatment technologies. Contact Lyle Jones at 302-739-9939 for more information on the assessment tool.

**Water Supply**

The project information sheets state water will be provided to the project by the City of Dover via a central water system.  DNREC records indicate that the project is located within the public water service area granted to the City of Dover under Certificate of Public Convenience and Necessity 90-CPCN-07.

Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.

All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising.

Should you have any questions concerning these comments, please contact Rick Rios at 302-739-9944.

**Sediment and Erosion Control/ Stormwater Management**

A detailed sediment and stormwater plan will be required prior to any land disturbing activity taking place on the site. Contact the reviewing agency to schedule a pre-application meeting to discuss the sediment and erosion control and stormwater management components of the plan as soon as practicable.  The site topography, soils mapping, pre- and post-development runoff, and proposed method(s) and location(s) of stormwater management should be brought to the meeting for discussion. The plan review and approval as well as construction inspection will be coordinated through the Kent Conservation District. Contact the Kent Conservation District at (302) 741.2600 for details regarding submittal requirements and fees.

Because of the parcel's location in an impaired watershed and the amount of impervious surface, consider incorporating more green technology BMPs and low impact development practices to reduce stormwater flow and to meet water quality goals. Minimize the amount of parking to the maximum extent practicable to reduce the amount of impervious surfaces. Incorporate pervious technology for overflow parking areas, parking spaces, etc., when possible and allow for shared parking between commercial areas. Coordinate with the local jurisdiction to determine if (a) variance(s) would be needed.

The Sediment and Stormwater Management Program ensures sediment and erosion control plans and stormwater plans comply with local land use ordinances and policies, including the siting of stormwater management facilities. However, DNREC does not support placement in resource protection areas or the removal of trees for the sole purpose of placement of a stormwater management facility/practice.

**Drainage**

The Drainage Program is aware of existing drainage concerns on Morgan Branch downstream of this area. Please contact the Sediment & Stormwater Program of the Kent Conservation District to discuss the probability of a downstream analysis for this project. The Drainage Program requests that the engineer take precautions to ensure the project does not hinder any off site drainage upstream of the project or create any off site drainage problems downstream by the release of on site storm water. The Drainage Program requests that the engineer check existing downstream conditions for function and blockages prior to the construction. Notify downstream landowners of the change in volume of water released on them.

**Rare Species**

DNREC has never surveyed this property; therefore, it is unknown if there are State-rare or federally listed plants, animals or natural communities at this project site. They do have records of Geum laciniatum var laciniatum (rough avens), a State-rare plant, adjacent to this project site and it could occur within the project site as well.

**Forest Preservation**

This site contains forested wetlands which can support an array of plant and animal species. Not only will a portion of this forest be cleared, but buildings, the stormwater pond, and roadways are well within 100 feet of wetland boundaries. Upland buffers around wetlands are important for protecting the function and integrity of the wetlands and for providing critical breeding habitat for wetland dependent species during a portion of their life cycle.

Cumulative forest loss throughout the State is of utmost concern to the Division of Fish and Wildlife which is responsible for conserving and managing the State's wildlife (see www.fw.delaware.gov and the Delaware Code, Title 7). Because of an overall lack of forest protection, we have to rely on applicants and/or the entity that approves the project (i.e. counties and municipalities) to consider implementing measures that will aide in forest loss reduction.

Recommendations:

1. The only way to reduce tree clearing would be to downsize the project area.

2. Consider using an alternative method of stormwater management that does not require tree removal. Options should be discussed with the district engineer or entity that certifies the stormwater plan. It is also recommended that at least a 100 feet buffer of existing vegetation is left between the pond and the wetland boundary.

3. If trees have to be cleared, we recommend they not be cleared from April 1st to July 31st to reduce impacts to wildlife that utilize trees for breeding. This would only protect those species for one breeding season because once trees are cleared there is an overall loss of habitat.

**Nuisance Waterfowl**

Wet ponds created for stormwater management purposes may attract resident Canada geese and mute swans that will create a nuisance. High concentrations of waterfowl in ponds create water-quality problems, leave droppings on lawn and paved areas and can become aggressive during the nesting season. Short manicured lawns around ponds provide an attractive habitat for these species. Exclusion is one of the most effective methods at deterring geese. In a commercial setting such as this project, completely fencing the pond at the edge (even one foot high) may be feasible. Even though geese can fly over the fence, if they constantly have to fly between land and water the area is less desirable. If fencing is not a desired option, we recommend native plantings, including tall grasses, wildflowers, shrubs, and trees at the edge and within an adequate buffer (15-30 feet in width) around the ponds. When the view of the surrounding area from the pond is blocked, geese can't scan for predators and are less likely to reside and nest in the area of the pond. The vegetation also blocks the ability to easily move between land and water.

At this time, DRNEC does not recommend using monofilament grids due to the potential for birds and other wildlife to become entangled if the grids are not properly installed and maintained. In addition, the on-going maintenance (removing entangled trash, etc.) may become a burden to the property owner/land manager.

The Division of Fish and Wildlife does not provide goose control services, and if problems arise, the property owner/land manager will have to accept the burden of dealing with these species (e.g., permit applications, costs, securing services of certified wildlife professionals). Solutions can be costly and labor intensive; however, with proper landscaping, monitoring, and other techniques, geese problems can be minimized.

**Underground Storage Tanks**

There are two inactive LUST site(s) located near the proposed project:

Hall's Auto & Tire Service, Facility # 1-000012, Project # K9011097
Furr's Tire Center, Facility # 1-000444, Project # K9404076

No environmental impact is expected from the above inactive/active LUST site(s). However, should any underground storage tank or petroleum contaminated soil be discovered during construction, the Tank Management Branch must be notified as soon as possible. It is not anticipated that any construction specifications would need to be changed due to petroleum contamination. However, should any unanticipated contamination be encountered and PVC pipe is being utilized, it will need to be changed to ductile steel with nitrile rubber gaskets in the contaminated areas.

**Site Investigation and Restoration**

One Site Investigation and Restoration Branch (SIRB) site was found within a half-mile radius of the proposed site: Dover Air Force Base (DE-0031) is located south east of the proposed site. Investigations revealed the presence of volatile organic compounds and metals in the groundwater. The site was divided into 7 operable units. Each unit has undergone extensive remediation, which include groundwater cleanup and hazardous waste removal. DNREC-SIRB foresees no negative impact on the proposed site.

**<u>State Fire Marshal's Office – Contact: R.T. Leicht 739-4394</u>**

This project is located within the City of Dover. You should contact the City of Dover Fire Marshal's Office to determine what the site plan submittal requirements are for this project.

**<u>Department of Agriculture - Contact: Scott Blaier 698-4500</u>**

The Delaware Department of Agriculture has no objections to the proposed industrial park. The project is located within the City of Dover, and the *Strategies for State Policies and Spending* encourages environmentally responsible development in Investment Level 2 and 3 areas.

*Right Tree for the Right Place*

The Delaware Department of Agriculture Forest Service encourages the developer to use the “Right Tree for the Right Place” for any design considerations. This concept allows for the proper placement of trees to increase property values in upwards of 25% of appraised value and will reduce heating and cooling costs on average by 20 to 35 dollars per month. In addition, a landscape design that encompasses this approach will avoid future maintenance cost to the property owner and ensure a lasting forest resource.

*Do Not Plant List*
Due to the high risk of mortality from insects and disease, the Delaware Forest Service does not recommend planting any of the following species:

Callery Pear
Leyland Cypress
Red Oak (except for Willow Oak)
Ash Trees

Please contact the Delaware Forest Service for more information at (302) 698-4500.

*Native Landscapes*

The Delaware Department of Agriculture and the Delaware Forest Service encourages the developer to use native trees and shrubs to buffer the property from the adjacent land-use activities near this site. A properly designed forested buffer can create wildlife habitat corridors and improve air quality to the area by removing six to eight tons of carbon dioxide annually and will clean our rivers and creeks of storm-water run-off pollutants. To learn more about acceptable native trees and how to avoid plants considered invasive to our local landscapes, please contact the Delaware Department of Agriculture Plant Industry Section at (302) 698-4500.

*Tree Mitigation*

The Delaware Forest Service encourages the developer to implement a tree mitigation program to replace trees at a 1:1 ratio within the site and throughout the community. This will help to meet the community's forestry goals and objectives and reduce the environmental impacts to the surrounding natural resources. To learn more, please contact our offices at (302) 349-5754.

**Public Service Commission - Contact: Andrea Maucher 739-4247**

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines. Contact: Malak Michael at (302) 739-4247.

**Department of Education – Contact: John Marinucci 735-4055**

This proposed project is in the Capital School District. This is a site plan review for industrial/commercial use. This site plan review is industrial/commercial in nature with no apparent impact on educational service delivery or infrastructure and, as such DOE has no objections or comments regarding this request
Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

Constance C. Holland

Constance C. Holland, AICP
Director

CC: City of Dover
Dover Air Force Base